

**[0060]** An improved, more durable heat conductive composition for transferring heat from a heat-dissipating component to a heat dissipater and method of producing the same. The composition preferably comprises a base consisting of paraffin and, optionally, paraffin and petrolatum having electrically-conductive particles suspended therein, which preferably include graphite diamond, or elemental metals such as silver. In the preferred embodiment, the composition further includes a resin polymer to increase durability. The composition is formulated to be solid in the range of normal room temperatures, but liquify once subjected to temperatures just below the range at which heat generating electronic semi conductor devices typically operate. The present invention further comprises processes for packaging the compositions of the present invention, as well as applying the heat conductive composition to an interface between a heat-dissipating component and a heat sink.